Attachment F – Network Information

Integrated network architecture

We provide services to our customers over a single integrated network that supports local, long distance and high-speed data and Internet services. Our integrated network architecture includes customer premises equipment, unbundled network elements, collocations, switches, routers, operating and application software and interoffice and long-distance transport facilities.

It is our strategy to own the intelligent and value-added components of our network such as our hybrid voice and data switches while we lease readily available transport facilities such as unbundled ILEC loops and interoffice and long haul transmission facilities. We are in the process of deploying Cable Modem/DSL technology to increase the data carrying capacity and bandwidth of the unbundled loops, transforming them narrowband to broadband. This will enable us to provide a range of new services, including various high-speed data services and Internet capabilities.

Accessing the customer through unbundled network elements

Our integrated network begins with out customers. We connect them by leasing the ILEC's ubiquitous copper loops that run into homes and offices. These loops are known as unbundled network element loops, or UNE-Ls. Through our processes, we are able to rapidly move the UNE-Ls from the LEC's switch to our switch using our collocation equipment.

Collocation facilities

Each UNE-L we deploy is a direct connection from our customer to one of our collocation sites located in the central office of the ILEC. Within each collocation site, we have deployed or are in the process of deploying both Nortel digital access nodes to support switched voice services and digital subscriber line access multiplexers to support our high-speed DSL service offerings. This collocation architecture supports integrated data and voice services and can be extended to support emerging applications as customer requirements dictate.

We will use Nortel Network's AccessNode equipment and we are planning to use Nortel's Universal Edge 9000 product line, which provides both voice and data access and can be integrated with virtually any manufacturer's digital switch. Since this equipment handles both traditional voice services and newer Cable Modem/DSL-type services, we are able to provide and administer these services to our customers without having to incur the cost of installing separate systems.

Switching platform

Our switching platform consists of Nortel DMS500 hybrid local and long distance switches. Each Nortel DMS500 switch acts as a centralized switching node connected to multiple collocations and may service one or more metropolitan areas. Compared to the more traditional network architecture, which requires a switch dedicated to each metropolitan area, we believe our network architecture results in a more efficient use of capital. In addition, each of these centralized switching nodes serves as an interconnection and concentration point between our Cable Modem/DSL and data network and the public Internet.

In conjunction with our deployment of Cable Modem/DSL-based services, we are also installing high-speed data switches known as ATM switches, which support multiservice traffic switching and routing in each of our switching offices.

Transport facilities

We lease the broadband facilities that connect our collocations and switches from both incumbent and competitive carriers at the DS3, OC-3, OC-12 and OC-48 levels.

Signaling System 7

The SS-7 signaling system reduces the time it takes to connect a call, thereby enhancing overall network efficiencies and increased customer satisfaction. It enables us to offer true number portability, which makes it easier to migrate customers to our network and permits the use of all calling features. It also enables us to offer advanced customer features like Enhanced 800 service and Caller ID With Name.

Network management and operational support

We monitor our network from our Longview, TX switching center. This center is intended to have multiple functions. It will provide continuous surveillance of all switching, collocation equipment and high-speed data services equipment to ensure proper and efficient network function. When a network alarm is received from any piece of equipment within our network, the center will respond to isolate the cause and either switch to backup equipment or dispatch technical assistance to the site. It is our goal to remedy any network problems before they affect a customer's service.

Internet services

We construct, own and operate those elements of our Internet network that contain the intelligent components and offer enhanced services to our customers. Our data centers contain the various servers that provide the security, user authentication, e-mail, domain-name translations, accounting, Internet access, routing, web hosting and other functions that are fundamental to serving high-speed and dial-up Internet customers.